## 2.3 Project Planning and Evaluation

## **Project Planning**

The Mining Research Plan described in Chapter I establishes the general areas of research need. This section summarizes the administrative processes for populating the research portfolio. In December of each year a call is issued for concept papers on possible new projects for the upcoming fiscal year beginning the following October. An example of the call for concepts is shown below:

From: Niezgoda, Karen A.

Sent: Thursday, December 09, 2004 4:45 PM

To: All - NIOSH/PRL
Subject: FY2006 New Concepts

The calendar may still say 2004, but it's time to start developing the FY2006 research program. The first step is the preparation of Concept Papers.

We will continue to initiate new projects aimed at high-priority mining-specific health and safety problems. Priorities for new research projects have been established based on: 1) stakeholder needs, 2) surveillance data, and 3) available resources. These priorities include:

- Demonstration of Intervention Effectiveness:
  - Reducing the recurring high fatalities from powered haulage in both underground and surface mines, falls of ground in underground mines, and working around machinery/equipment in both underground and surface mines.
  - Reducing the recurring high injury incidence from handling materials, slips/falls, MSD's (especially among aging miners)
  - Reducing the recurring areas of unacceptable disease prevalence (silicosis, pneumoconiosis, hearing loss)
- · Dust Monitoring and Control
- Diesel Monitoring and Control
- Hearing Loss Prevention/Engineering Noise Control

The Concept Papers should be submitted through your supervisory chain to Karen Niezgoda by January 31, 2005. You are encouraged to discuss concepts with your supervisor prior to the preparation of a paper.

Concept papers should follow the attached format.

The concept papers are evaluated by the laboratory lead team for program needs, likelihood of success, and potential impact. Some concepts are rejected or deferred. The submitters of the most promising concepts are asked to prepare full project proposals for external peer review and possible project initiation in the beginning of the following fiscal year. The process for preparing these full proposals and the external peer review process are described in the document "Procedures for External Peer Review of Intramural Projects" below. Two example proposals are also provided.

A few concepts may appear promising, but the research idea needs a great deal of additional work before a complete proposal can be prepared. Such concepts may be funded as pilot projects for one year to test feasibility or to gather additional information. Full project proposals must be prepared for these projects and receive favorable external peer review before they are fully funded to completion.

Appendix A contains forms and instructions for submitting full research project proposals for new intramural projects in the NIOSH Mining Program. Such proposals are normally evaluated by external peer reviewers to help ensure the quality of the research done in the Program. The format of the proposals is based on the R01 research grant application format used by NIH and CDC, and is similar to the format used for NIOSH NORA proposals.

## **Project Evaluation**

Once projects are underway, they receive various types of internal and external review. Project plans are prepared and submitted as part of the NIOSH IRIS management information system. In addition, each calendar year work plans are prepared, that also include more detailed schedules of the tasks to be completed on each project. The individual performance plans of the project leaders and other project staff contain deadlines for completion of key research project tasks. Formal and informal reviews are conducted to ensure that projects remain on track. As a result of reviews projects: may be terminated and resources directed elsewhere; may receive additional resources: or may have their scope or milestones significantly altered. Branch chiefs schedule periodic meetings with staff to review progress on individual projects. These project meetings are sometimes also attended by the laboratory managers. All projects are reviewed annually at the "mid-year reviews" at which presentations are made on each project for branch staff and managers from both mining laboratories and the Office of the Associate Director for Mining and Construction.

Some of the more critical and visible on-going projects receive external review as well. The Mine Safety and Health Research Advisory Committee reviews some of the more critical projects and provides advice on progress and future direction. The projects in areas included in partnerships are reviewed at periodic meetings. These partnerships are described in section 2.6 - Partnerships.

Review processes extend to the research results when they are prepared for presentation and publication for the outside world. All research publications are subject to internal and external peer review. Publications for peer-reviewed journals are reviewed internally by branch and laboratory management before they are submitted to the peer-reviewed journal editor. In addition such papers may also be sent for review by MSHA or other NIOSH divisions if they impact MSHA regulations or research in other parts of NIOSH. Papers which are to be submitted for publication in non-peer reviewed journals or conference proceedings are also given at least three technical reviews, one by a reviewer within the laboratory, and two by reviewers external to the laboratory. Appendix B describes the process for review of research papers and contains flowcharts illustrating the publication review processes.